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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,194	02/07/2002	Masatsugu Ogawa	NEC GNE471	4278

7590
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07/26/2004

EXAMINER

BATTAGLIA, MICHAEL V

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 07/26/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,194

Applicant(s)

OGAWA, MASATSUGU

Examiner

Michael V Battaglia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informality. In the title of the invention, replacing "COMPNESATION" with -COMPENSATION- is suggested.

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Citation of Relevant Prior Art

5. Eastman et al (US 5,646,919) discloses making a series of trial recording to determine a tracking offset that corresponds to a push-pull tracking signal as a conventional approach (Col. 1). Romano et al (US 4,571,712) discloses a tracking offset that is determined during a calibration procedure (Col. 11 and 12). Kumagai (US 6,594,210) (Col. 12), Corsover et al (US 4,459,690) (Col. 2), and Fushimi et al (US 6,345,023) (Cols. 5 and 10) disclose generating tracking error from an optical disc having wobbled grooves

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where beat components/signals are reduced, unwanted and removed, and suppressed, respectively.

Allowable Subject Matter

6. Claims 1-25 are allowable over the prior art of record.

In regard to claim 1, none of the references of record alone or in combination disclose or suggest a method for compensating track offset in an optical disk drive, comprising: (a) providing an optical disk with wobbled grooves; the wobbled grooves being used for generating a wobbling signal with a wobbling period; (b) recording a beat-inducing signal on the disk; **a period of the beat-inducing signal having a specific relationship with the wobbling period in such a way that a beat signal is induced by the beat-inducing signal and the wobbling signal;** (c) generating a tracking-error signal using a push-pull method by optically reading the wobbled grooves of the disk and the beat-inducing signal recorded on the disk; **the tracking-error signal containing a beat signal induced by the beat-inducing signal and the wobbling signal;** and (d) compensating track offset based on the beat signal contained in the tracking-error signal.

In regard to claim 7, none of the references of record alone or in combination disclose or suggest A method for compensating track offset in an optical disk drive, comprising: (a) providing an optical disk with wobbled grooves and a beat-inducing signal; the wobbled grooves being used for generating a wobbling signal with a wobbling period; **a period of the beat-inducing signal having a specific relationship with the wobbling period in such a way that a beat signal is induced by the beat-inducing signal and the wobbling signal;** (b) generating a tracking-error signal using a push-pull method by optically reading

the wobbled grooves and the beat-inducing signal recorded of the disk; the tracking-error signal containing a beat signal induced by the beat-inducing signal and the wobbling signal; and (c) compensating track offset based on the beat signal contained in the tracking-error signal.

In regard to claim 13, none of the references of record alone or in combination disclose or suggest A system for compensating track offset in an optical disk drive, comprising: (a) means for recording a beat-inducing signal on an optical disk with wobbled grooves; the wobbled grooves being used for generating a wobbling signal with a wobbling period; **a period of the beat-inducing signal having a specific relationship with the wobbling period in such a way that a beat signal is induced by the beat-inducing signal and the wobbling signal;** (b) means for generating a tracking-error signal using a push-pull method by optically reading the wobbled grooves of the disk and the beat-inducing signal recorded on the disk; **the tracking-error signal containing a beat signal induced by the beat-inducing signal and the wobbling signal;** and (c) means for compensating track offset based on the beat signal contained in the tracking-error signal.

In regard to claim 19, none of the references of record alone or in combination disclose or suggest A system for compensating track offset in an optical disk drive, comprising: (a) means for generating a tracking-error signal using a push-pull method by optically reading wobbled grooves of an optical disk and a beat-inducing signal recorded on the disk; the wobbled grooves being used for generating a wobbling signal with a wobbling period; **a period of the beat-inducing signal having a specific relationship with the wobbling period in such a way that a beat signal is induced by the beat-inducing signal and the wobbling signal;** **the tracking-error signal containing a beat signal induced by the**

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beat-inducing signal and the wobbling signal; and (b) means for compensating track offset based on the beat signal contained in the tracking-error signal.

Conclusion

7. This application is in condition for allowance except for the formal matters noted above. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

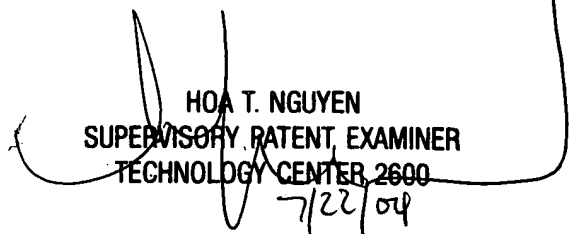
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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7/22/04